ABSTRACT

The present invention is a coldplate hotspot spray cooling system that cools an electronic component creating a varying amount of heat across its surfaces. Liquid coolant is dispensed upon a spray pin protruding from a base wherein the liquid creates a very high heat absorbing evaporative thin film. The spray pin is located over an area of the chip that produces a large heat flux, typically referred to as a hotspot. The small size and isolation of the spray pin provides the ability to generate very large heat fluxes. Multiple spray pins are possible.